

**WHAT IS CLAIMED IS:**

1        1. A communications network comprising a central unit, a first peripheral unit,  
2 and a second peripheral unit; the central unit being connected by a first link to the first  
3 peripheral unit and by a second link to the second peripheral unit, the communications  
4 network further comprising:

5            means for providing a radio link between the first peripheral unit and the second  
6 peripheral unit;

7            means for providing communication between the central unit and the second  
8 peripheral unit over the radio link upon failure of the second link.

1        2. The apparatus of claim 1, wherein the means for providing communication  
2 reroutes traffic carried over the second link to the radio link and the first link.

1        3. The apparatus of claim 1, wherein the means for providing communication  
2 provides control information concerning one of the second link and the second  
3 peripheral unit to the radio link and the first link.

1        4. The apparatus of claim 3, wherein the means for providing communication  
2 provides fault localization information concerning failure of the second link to the radio  
3 link and the first link.

1        5. The apparatus of claim 1, wherein one of (1) the central unit, and (2) the first  
2 peripheral unit determine whether traffic and/or control information is to be rerouted  
3 from the second link to the first link.

1        6. The apparatus of claim 1, wherein the central unit, the first peripheral unit,  
2 and the second peripheral unit are each nodes of the communications network.

1        7. The apparatus of claim 1, wherein the communications network is a radio  
2 access telecommunications network, wherein the central unit is a radio network control  
3 (RNC) node; wherein the first peripheral unit is a first base station; and wherein the  
4 second peripheral unit is a second base station.

1        8. The apparatus of claim 1, wherein the central unit, the first peripheral unit,  
2 and the second peripheral unit comprise portions of a distributed radio base station node  
3 of a radio access telecommunications network.

1        9. The apparatus of claim 8, wherein the central unit comprises data processing  
2 and control functions of the distributed radio base station node, and wherein at least one  
3 of the first peripheral unit and the second peripheral unit comprises a transceiver of the  
4 distributed radio base station node.

1        10. A communications network comprising:  
2            a central unit;  
3            a first peripheral unit;  
4            a second peripheral unit;  
5            a first link which connects the central unit to the first peripheral unit;  
6            a second link which connects the central unit to the second peripheral unit,  
7            a radio link connecting the first peripheral unit and the second peripheral unit;  
8            wherein communication occurs between the central unit and the second  
9            peripheral unit over the radio link upon failure of the second link.

1        11. The apparatus of claim 10, wherein rerouting of traffic carried over the  
2 second link to the radio link and the first link occurs upon failure of the second link.

1        12. The apparatus of claim 10, wherein control information concerning one of  
2 the second link and the second peripheral unit is carried over the second link to the  
3 radio link and the first link occurs upon failure of the second link.

1        13. The apparatus of claim 10, wherein the control information is fault  
2 localization information concerning failure of the second link.

1        14. The apparatus of claim 10, wherein one of (1) the central unit, and (2) the  
2 first peripheral unit determine whether traffic and/or control information is to be  
3 rerouted from the second link to the first link.

1        15. The apparatus of claim 10, wherein the central unit, the first peripheral unit,  
2 and the second peripheral unit are each nodes of the communications network.

1        16. The apparatus of claim 15, wherein the communications network is a radio  
2 access telecommunications network, wherein the central unit is a radio network control

3 (RNC) node; wherein the first peripheral unit is a first base station; and wherein the

4 second peripheral unit is a second base station.

1        17. The apparatus of claim 10, wherein the central unit, the first peripheral unit,  
2 and the second peripheral unit comprise portions of a distributed radio base station node  
3 of a radio access telecommunications network.

1        18. The apparatus of claim 17, wherein the central unit comprises data  
2 processing and control functions of the distributed radio base station node, and wherein  
3 at least one of the first peripheral unit and the second peripheral unit comprises a  
4 transceiver of the distributed radio base station node.

1        19. A peripheral unit for use in a communications network which also includes  
2 a central unit and another peripheral unit, the central unit being connected by a first link  
3 to the another peripheral unit and by a second link to the peripheral unit, the peripheral  
4 unit comprising means for communicating with the central unit over a radio link upon  
5 failure of the second link, the radio link being established between the peripheral unit  
6 and the another peripheral unit.

1        20. The apparatus of claim 19, wherein the means for communicating reroutes  
2 traffic carried over the second link to the radio link and the first link.

1        21. The apparatus of claim 19, wherein the means for communicating provides  
2 control information concerning one of the second link and the peripheral unit to the  
3 radio link and the first link.

1        22. The apparatus of claim 21, wherein the means for communicating provides  
2 fault localization information concerning failure of the second link to the radio link and  
3 the first link.

1        23. The apparatus of claim 19, wherein the peripheral unit is a base station of a  
2 radio access telecommunications network.

1        24. The apparatus of claim 19, wherein the central unit, the first peripheral unit,  
2 and the second peripheral unit comprise portions of a distributed radio base station node  
3 of a radio access telecommunications network.

1        25. The apparatus of claim 24, wherein the central unit comprises data  
2 processing and control functions of the distributed radio base station node, and wherein  
3 at least one of the first peripheral unit and the second peripheral unit comprises a  
4 transceiver of the distributed radio base station node.

1        26. For use in a communications network comprising a central unit, a first  
2 peripheral unit, and a second peripheral unit; the central unit being connected by a first  
3 link to the first peripheral unit and by a second link to the second peripheral unit, a  
4 method comprising:

5            providing communication between the central unit and the second peripheral unit  
6 over a radio link upon failure of the second link, the radio link extending between the  
7 first peripheral unit and the second peripheral unit.

1        27. The method of claim 26, wherein the step of providing communication  
2 comprises rerouting traffic carried over the second link to the radio link and the first  
3 link.

1        28. The method of claim 26, wherein the step of providing communication  
2 comprises providing control information concerning one of the second link and the  
3 second peripheral unit to the radio link and the first link.

1        29. The method of claim 28, wherein the step of providing control information  
2 comprises providing fault localization information concerning failure of the second link  
3 to the radio link and the first link.

1        30. The method of claim 26, wherein the central unit, the first peripheral unit,  
2 and the second peripheral unit are each nodes of the communications network.

1        31. The method of claim 30, wherein the communications network is a radio  
2 access telecommunications network, wherein the central unit is a radio network control

3 (RNC) node; wherein the first peripheral unit is a first base station; and wherein the  
4 second peripheral unit is a second base station.

1 32. The method of claim 26, wherein the central unit, the first peripheral unit,  
2 and the second peripheral unit comprise portions of a distributed radio base station node  
3 of a radio access telecommunications network.

1 33. The method of claim 32, wherein the central unit comprises data processing  
2 and control functions of the distributed radio base station node, and wherein at least one  
3 of the first peripheral unit and the second peripheral unit comprises a transceiver of the  
4 distributed radio base station node.

1 34. The method of claim 26, further comprising the central unit determining  
2 whether traffic and/or control information is to be rerouted from the second link to the  
3 first link.

1 35. The method of claim 26, further comprising the first peripheral unit  
2 determining whether traffic and/or control information is to be rerouted from the second  
3 link to the first link.